

recently published list (Jour. N. Y. Ent. Soc. 64: 99-124, 1956) totals 143 species from 122 food-plants. Dr. Simpson writes me that in Maine Miss Patch kept a "Systematic file" of the species in her collection which he has kept up to date and which now totals about 380 species. Even though some of these are manuscript names this figure is rather remarkable when it is considered that Colorado, which has been intensively collected over a period of 60 years by several aphid specialists, has somewhat fewer species recorded. Dr. Kring writes that he now has records of about 177 species in Connecticut.

It was felt that the members of this Branch¹ might be interested in the foregoing brief statement of activities within their area looking towards a greater knowledge of this systematically difficult but intriguing and economically important group of insects—the aphids. So little is really known as yet of the aphid fauna of almost any region that it is relatively easy, by spending very little time, to make substantial additions to distribution and food-plant records. Chapman and Gambrell collecting at Geneva and Cazier and Gertsch collecting near New York City demonstrated this fact some years ago. I hope some of you may be encouraged to do likewise in your respective States.

PACHYHELEA, A NEW GENUS OF AMERICAN CERATOPOGONIDAE RELATED TO *PALPOMYIA* (DIPTERA)

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Study of the type of *Ceratopogon pachymerus* Williston and of the types of its synonyms, *Ceratopogon magnus* Coquillett and *Johannsenomyia latifemoris* Ingram and Macfie, reveals that this species is not closely related to any known genus of Ceratopogonidae. Therefore, a new genus is proposed for it.

Pachyhelea Wirth, new genus

Type species. *Ceratopogon magnus* Coquillett. I am selecting this synonym of *Pachyhelea pachymera* (Williston) as type be-

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cause there may be some doubt as to the identity of *pachymera*. The holotype of *pachymera* has only one radial cell, a character I regard as extremely unreliable (see discussion under *P. pachymera*).

Diagnosis of female. Body very stout and almost bare. Eyes bare and broadly separated. Palpus short and slender, third segment not enlarged. Antenna with segments 3–10 oval, 11–15 long and cylindrical, all with short, sparse verticils. Scutum very robust, with a short, conical, sharp, anterior spine on anterior midline; humeral pits well developed. Surface of scutum and scutellum with short fine hairs only, no stout bristles. Postscutellum very prominent, due to pronounced upward deflection of scutellum. Abdomen stout, slightly petiolate at base, slightly drooping on distal half, seventh tergum much narrowed, longer than broad. Legs rather stout, hind coxa greatly enlarged; hind femur greatly swollen and bowed outwardly, curling up and back around the sides of the abdomen; hind tibia slightly thickened and sinuate; femora and tibia without spines. First tarsomere on hind legs about 3 times length of second, slightly longer than 2–5 combined, 3 and 4 very short, 4 slightly cordate, 5 slender and armed ventrally on distal half with three pairs of slender, pointed black spines which are not true batonnets. Claws equal, each with a small mesal tooth at base; small on fore and mid legs, about half of length of fifth tarsomere; on hind legs much longer, about two-thirds as long as fifth tarsomere. Wing broad, anal lobe only moderately developed; macrotrichia absent, microtrichia well developed. Costa rather long, extending to 0.83 of distance to wing tip, not produced beyond tip of vein R_{4+5} ; two very narrow radial cells present, the second 2.1 times as long as first; the crossvein very short, scarcely longer than broad (apparently absent in type of *Ceratopogon pachymerus* Williston). Medial fork broadly sessile, veins M_1 and M_2 both bow posteriorly in middle; mediocubital fork just beyond level of $r-m$ crossvein; anal vein forks at proximal third of anal cell with posterior fork proceeding obliquely nearly to posterior wing margin.

Comparative notes. *Pachyhelea* is closely related to *Palpomylia* Meigen in general features, but differs in the very short (rudimentary) radial crossvein and unarmed femora. The peculiarly swollen hind femora are unique, as distinctively swollen as in *Serromylia* Meigen, but unarmed and of different structure, more closely resembling *Sphaeromyias* Curtis. *Pachyhelea* cannot be allied very closely with *Johannsenomyia* Malloch and *Sphaeromyias*, both of which usually have two radial cells with a very short, radial cross-

vein. These genera have typical ventral blunt spines (batonnets) on the fifth tarsomere, the fourth tarsomere is cylindrical, and the claws are externally barbed. Moreover, *Sphaeromyias*, some species of which have somewhat thickened femora, has ventral femoral spines and *Johannsenomyia*, always with slender femora, has them unarmed.

Pachyhelea pachymera (Williston), new combination

Ceratopogon pachymerus Williston, 1900, Biol. Cent. Amer., vol. 1, suppl., p. 224 (female; Mexico).

Probezzia pachymera, Malloch, 1914, Proc. Biol. Soc. Washington 27: 137.

Ceratopogon magnus Coquillett, 1905, J. New York Ent. Soc. 13: 61 (female; Texas). *NEW SYNONYMY*.

Johannseniella magna, Malloch, 1914, Bul. Illinois St. Lab. Nat. Hist. 10: 227.

Johannsenomyia magna, Malloch, 1915, idem. 10: 338.

Sphaeromyias albidiventris Kieffer, 1917, Ann. Mus. Nat. Hungarici 15: 317 (female; Colombia). *NEW SYNONYMY*.

Johannsenomyia latifemoris Ingram and Macfie, 1931, Dipt. Patagonia & S. Chile, part II, fasc. 4, p. 231 (female; Argentina); Macfie, 1940, Proc. R. Ent. Soc. London (B) 9: 75 (male; Brazil). *NEW SYNONYMY*.

I have examined the types of *pachymerus* Williston and *latifemoris* Ingram and Macfie in the British Museum (Natural History) and that of *magnus* Coquillett in the U. S. National Museum. They agree closely with Ingram and Macfie's excellent and detailed description of *latifemoris*. The synonymy of *albidiventris* Kieffer is from the original description, as the type in the Hungarian Museum in Budapest was presumably destroyed in the 1956 disturbances.

Apparently the female Williston described as *pachymerus* differs from all other known specimens of this species in having only one radial cell. In related genera the presence or absence of a radial crossvein is a variable character, in some species even being present on one wing and absent on the other of the same individual. Therefore, its absence in the type of *pachymerus* is not considered to be of specific, to say nothing of generic, value.

New Record: Panama; Fort Davis, C. Z., Aug. 28, 1952 (F. S. Blanton) light trap, 1 ♀.

Correction. The mailing date of the preceding issue of the Bulletin was March 12, not February 12 as indicated.